

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in this application:

LISTING OF CLAIMS:

Claims 1 to 9. (Canceled).

10. (Previously Presented) A method for laser drilling comprising:
acting upon a region of a workpiece by a laser beam, so that a hole is produced in the region;

implementing the method under an adjustable process-gas atmosphere in such a way that, due to a reciprocal action between the laser beam and a process gas, plasma forms in at least one of the region and the hole acted upon by the laser beam; and
arranging a backing at an outlet opening of the hole produced by the laser beam.

11. (Previously Presented) The method according to claim 10, wherein an inert gas, with an addition of noble gases, is used as the process gas.

12. (Previously Presented) The method according to claim 11, wherein the inert gas includes nitrogen, and the noble gases include at least one of helium and argon.

13. (Previously Presented) The method according to claim 10, further comprising pressurizing the process gas at a pressure of maximally 1.5 bar.

14. (Previously Presented) The method according to claim 10, further comprising adjusting an impingement direction of the process gas by tilting relative to a direction of the laser beam, a tilting angle being up to 15°.

15. (Previously Presented) The method according to claim 10, wherein a material used for the backing has at least one of thermal and optical properties that influence a form of the outlet opening, the material including at least one of a metallic material and a copper-containing material.

16. (Previously Presented) The method according to claim 10, wherein the backing is arranged at a distance from at least one of the outlet opening and the workpiece that influences a form of the outlet opening, the distance being between 20 µm and 200 µm.

17. (Previously Presented) The method according to claim 10, wherein the backing is arranged with tilting at a predetermined angle with respect to at least one of the outlet opening and the workpiece, the tilting influencing a form of the outlet opening, the tilting angle being up to 20°.

18. (Previously Presented) A device for laser drilling comprising:
means for acting upon a region of a workpiece by a laser beam so as to produce a hole; and

means for adjusting a process-gas atmosphere in at least one of the region and the hole acted upon by the laser beam, in such a way that, due to a reciprocal action between the laser beam and a process gas, plasma forms in at least one of the region and the hole acted upon by the laser beam, a backing being able to be positioned at an outlet opening of the produced hole.

19. (Previously Presented) The device according to claim 18, wherein the means for adjusting the process-gas atmosphere includes at least one gas nozzle.

20. (New) A method for laser drilling comprising:
acting upon a region of a workpiece by a laser beam, so that a hole is produced in the region;
implementing the method under an adjustable process-gas atmosphere in such a way that, due to a reciprocal action between the laser beam and a process gas, plasma forms in at least one of the region and the hole acted upon by the laser beam; and
arranging a backing at an outlet opening of the hole produced by the laser beam, the backing arranged with tilting at a specific angle with respect to at least one of the outlet opening and the workpiece, the angle influencing a form of the outlet opening.

21. (New) The method according to claim 20, wherein an inert gas, with an addition of noble gases, is used as the process gas.

22. (New) The method according to claim 21, wherein the inert gas includes nitrogen, and the noble gases include at least one of helium and argon.

23. (New) The method according to claim 20, further comprising pressurizing the process gas at a pressure of maximally 1.5 bar.

24. (New) The method according to claim 20, further comprising adjusting an impingement direction of the process gas by tilting relative to a direction of the laser beam, a tilting angle being up to 15°.

25. (New) The method according to claim 20, wherein a material used for the backing has at least one of thermal and optical properties that influence the form of the outlet opening, the material including at least one of a metallic material and a copper-containing material.

26. (New) The method according to claim 20, wherein the backing is arranged at a distance from at least one of the outlet opening and the workpiece that influences the form of the outlet opening, the distance being between 20 µm and 200 µm.

27. (New) The method according to claim 20, wherein the tilting angle is up to 20°.

28. (New) A device for laser drilling comprising:

means for acting upon a region of a workpiece by a laser beam so as to produce a hole; and

means for adjusting a process-gas atmosphere in at least one of the region and the hole acted upon by the laser beam, in such a way that, due to a reciprocal action between the laser beam and a process gas, plasma forms in at least one of the region and the hole acted upon by the laser beam, a backing being able to be positioned at an outlet opening of the produced hole, a tilting of the backing with respect to at least one of the outlet opening and the workpiece is adjustable for forming the outlet opening.

29. (New) The device according to claim 28, wherein the means for adjusting the process-gas atmosphere includes at least one gas nozzle.